



Figure 14

## ELECTROMAGNETIC WAVE SHIELDING RATE TEST OF MG NET (summary)

**Test working day:** December 10, 1997

**Measurement person:** America Pennsylvania state-run college  
Electron sound material & apparatus engineering research center  
Prof. Vijay K. Varadan  
(A Doctor of Engineering: a specialist of electrical machinery, machine,  
and natural science)

**The measurement facilities:** HVS Technologies, Inc.  
(An electron sound engineering research center belonging  
electromagnetic wave absorption shielding material and test  
equipment specialized agencies)

**A use electromagnetic wave shielding material:** MG net electromagnetic wave screening material

**Measurement instrument:** HVS Free Space Microwave Measurement System

**Instrumentation:** MG net electromagnetic wave absorption factor and also permeation  
attenuation rate  
Frequency 0.045 GHz ~ 1.4 GHz  
Frequency 7.75 GHz ~ 13.0 GHz

**By using the method:** HVS Free Space Microwave Measurement System electromagnetic wave  
absorption factor and permeation attenuation rate of MG net a  
measurement

**Test as a result of:** Frequency 0.045 GHz ~ 1.4 GHz at the time of  
Around 1% of absorption factor  
Blocking rate 97% ~ 99% or more  
Frequency 7.75 GHz ~ 13.0 GHz at the time of  
Around 1% of absorption factor  
Blocking rate 90% ~ 99% or more

**The comment of the Dr. Varadan:** this material is an ideal material as an electromagnetic wave  
blocking material.  
It is when send to a market and use to many electrical  
machinery and apparatus including a mobile phone now.